



030560-057.ST25

Amctt/F

SEQUENCE LISTING

<110> Altmann, Friedrich
<120> Fucosyl Transferase Gene
<130> 030560-057
<140> US 09/913,858
<141> 2001-08-20
<150> PCT/AT00/00040
<151> 2000-02-17
<150> AT A 270/99
<151> 1999-02-18
<160> 31
<170> PatentIn version 3.1
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<212> DNA
<213> Unknown Organism
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<223> Description of Unknown Organism:plant

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tcatggaatc gtgtccataa cgccaaaatt ttccatttcc ctttgatttt tagtttattt 180
tgcggaattg gcagttgggg gcgcaattga atgatgggtc tgttgacgaa tcttcgaggg 240
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aagaggaaat ggagcaatct aatgcctctt gttgttgccc ttgtggtcat cgcggagatc 360
gcgtttctgg gtaggttgga tatggccaaa aacgccgcca tgggtgactc cctcgtgac 420
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aagtcgtgtt cgggttgatg taaatttggg tttagtgggg atagaaagcc agatgccgca 660
tttgggttac ctcaaccaag tggaaacagc agcattctgc gatcaatgga atcagcagaa 720
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gttgcaaaga ccatgagata tctagcagaa aatccogaag catataatca atcattgagg 1260
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ccaagcctta agagacgtcc ttgcaagtgc actagagggc cagaaaccgt atatcatatc 1440
tatgtcagag aaaggggaag gtttgagatg gagtccattt acctgaggtc tagcaattta 1500
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gtatggaaga ctgaaaggcc tgaagttata agagggggga gtgctttaaa actctacaaa 1620
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gctgatttca ggagtcactt ggagaacaat ccttgtgcca agtttgaagt catttttgtg 1740
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<210> 2
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<212> PRT
<213> Unknown Organism

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<220>
<223> Description of Unknown Organism:plant

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Gln Gln Asp Ser Leu Pro Val Leu Ala Pro Gly Gly Asn Pro Lys Arg
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Lys Trp Ser Asn Leu Met Pro Leu Val Val Ala Leu Val Val Ile Ala
  35             40             45

Glu Ile Ala Phe Leu Gly Arg Leu Asp Met Ala Lys Asn Ala Ala Met
  50             55             60

Val Asp Ser Leu Ala Asp Phe Phe Tyr Arg Ser Arg Ala Val Val Glu
  65             70             75             80

Gly Asp Asp Leu Gly Leu Gly Leu Val Ala Ser Asp Arg Asn Ser Glu
      85             90             95

Ser Tyr Ser Cys Glu Glu Trp Leu Glu Arg Glu Asp Ala Val Thr Tyr
  100            105            110

Ser Arg Gly Phe Ser Lys Glu Pro Ile Phe Val Ser Gly Ala Asp Gln
  115            120            125

Glu Trp Lys Ser Cys Ser Val Gly Cys Lys Phe Gly Phe Ser Gly Asp
  130            135            140

Arg Lys Pro Asp Ala Ala Phe Gly Leu Pro Gln Pro Ser Gly Thr Ala
  145            150            155            160

Ser Ile Leu Arg Ser Met Glu Ser Ala Glu Tyr Tyr Ala Glu Asn Asn
  165            170            175

Ile Ala Met Ala Arg Arg Arg Gly Tyr Asn Ile Val Met Thr Thr Ser
  180            185            190

Leu Ser Ser Asp Val Pro Val Gly Tyr Phe Ser Trp Ala Glu Tyr Asp

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195					200					205				
Met	Met	Ala	Pro	Val	Gln	Pro	Lys	Thr	Glu	Ala	Ala	Leu	Ala	Ala
210					215					220				
Phe	Ile	Ser	Asn	Cys	Gly	Ala	Arg	Asn	Phe	Arg	Leu	Gln	Ala	Leu
225					230					235				240
Ala	Leu	Glu	Lys	Ser	Asn	Ile	Lys	Ile	Asp	Ser	Tyr	Gly	Gly	Cys
				245					250					255
Arg	Asn	Arg	Asp	Gly	Arg	Val	Asn	Lys	Val	Glu	Ala	Leu	Lys	His
			260					265					270	Tyr
Lys	Phe	Ser	Leu	Ala	Phe	Glu	Asn	Ser	Asn	Glu	Glu	Asp	Tyr	Val
			275				280					285		Thr
Glu	Lys	Phe	Phe	Gln	Ser	Leu	Val	Ala	Gly	Thr	Val	Pro	Val	Val
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Gly	Ala	Pro	Asn	Ile	Gln	Asp	Phe	Ala	Pro	Ser	Pro	Gly	Ser	Ile
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His	Ile	Lys	Glu	Ile	Glu	Asp	Val	Glu	Ser	Val	Ala	Lys	Thr	Met
				325					330					335
Tyr	Leu	Ala	Glu	Asn	Pro	Glu	Ala	Tyr	Asn	Gln	Ser	Leu	Arg	Trp
			340					345					350	Lys
Tyr	Glu	Gly	Pro	Ser	Asp	Ser	Phe	Lys	Ala	Leu	Val	Asp	Met	Ala
		355					360					365		Ala
Val	His	Ser	Ser	Cys	Arg	Leu	Cys	Ile	His	Leu	Ala	Thr	Val	Ser
				370			375					380		Arg
Glu	Lys	Glu	Glu	Asn	Asn	Pro	Ser	Leu	Lys	Arg	Arg	Pro	Cys	Lys
385				390						395				400
Thr	Arg	Gly	Pro	Glu	Thr	Val	Tyr	His	Ile	Tyr	Val	Arg	Glu	Arg
				405					410					415
Arg	Phe	Glu	Met	Glu	Ser	Ile	Tyr	Leu	Arg	Ser	Ser	Asn	Leu	Thr
			420					425					430	Leu
Asn	Ala	Val	Lys	Ala	Ala	Val	Val	Leu	Lys	Phe	Thr	Ser	Leu	Asn
			435				440					445		Leu
Val	Pro	Val	Trp	Lys	Thr	Glu	Arg	Pro	Glu	Val	Ile	Arg	Gly	Gly
			450			455					460			Ser
Ala	Leu	Lys	Leu	Tyr	Lys	Ile	Tyr	Pro	Ile	Gly	Leu	Thr	Gln	Arg
465					470					475				480
Ala	Leu	Tyr	Thr	Phe	Ser	Phe	Lys	Gly	Asp	Ala	Asp	Phe	Arg	Ser
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Leu	Glu	Asn	Asn	Pro	Cys	Ala	Lys	Phe	Glu	Val	Ile	Phe	Val	
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<210> 3
 <211> 105
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: GlcNAc-alpha1,3-fucosyl

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 gtaactgaaa aattcttcca atcccttggt gctggaactg tccct 105

<210> 4
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Mung bean

<400> 4
 Glu Ala Leu Lys His Tyr Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn
 1 5 10 15
 Glu Glu Asp Tyr Val Thr Glu Lys Phe Phe Gln Ser Leu Val Ala Gly
 20 25 30
 Thr Val Pro
 35

<210> 5
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:n-terminal sequence
 of tryptic peptide

<220>
 <221> MISC_FEATURE
 <222> (5)..(5)
 <223> Xaa = any amino acid

<400> 5
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 1 5 10 15

<210> 6
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:n-terminal sequence
 of tryptic peptide

<400> 6
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 1 5 10

<210> 7
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:n-terminal sequence
 of tryptic peptide

<400> 7
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<210> 8
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:n-terminal sequence
 of tryptic peptide

<400> 8
 Gly Arg Phe Glu Met Glu Ser Ile Tyr Leu
 1 5 10

<210> 9
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer

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29

<210> 10
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer

<220>
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 <222> (14)..(17)
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<400> 10
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<210> 11
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer

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 <222> (6)..(6)
 <223> n = any nucleotide

<400> 11
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<210> 12
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 12
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<210> 13
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 <212> DNA
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<220>
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<400> 13
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<210> 14
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer

<400> 14
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<210> 15
<211> 24
<212> DNA
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<220>
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<400> 15
gaatgcaaag acggcacgat gaat 24

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 16
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<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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<210> 18
<211> 35
<212> PRT
<213> Mung Bean

<400> 18
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Glu Glu Asp Tyr Val Thr Glu Lys Phe Phe Gln Ser Leu Val Ala Gly
20 25 30
Thr Val Pro
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<210> 19
<211> 36
<212> PRT
<213> Homo sapiens

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 20 25 30
 Trp Ala Val Pro
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<210> 20
 <211> 36
 <212> PRT
 <213> Chin. Hampster

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 His Pro Asp Tyr Ile Thr Glu Lys Leu Trp Lys Asn Ala Leu Glu Ala
 20 25 30
 Trp Ala Val Pro
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<210> 21
 <211> 36
 <212> PRT
 <213> Homo sapiens

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 Gly Thr Val Pro
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<210> 22
 <211> 36
 <212> PRT
 <213> Mouse

<400> 22
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 His Arg Asp Tyr Ile Thr Glu Lys Phe Trp Arg Asn Ala Leu Ala Ala
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 Gly Ala Val Pro
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<210> 23
 <211> 36
 <212> PRT
 <213> Homo sapiens

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20 25 30
 Gly Ala Val Pro
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<210> 24
 <211> 36
 <212> PRT
 <213> Mouse

<400> 24
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 Gly Ala Val Pro
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<210> 25
 <211> 36
 <212> PRT
 <213> Rat

<400> 25
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 His Val Asp Tyr Asn Thr Glu Lys Leu Trp Arg Asn Ala Phe Leu Ala
 20 25 30
 Gly Ala Val Pro
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<210> 26
 <211> 36
 <212> PRT
 <213> Chicken

<400> 26
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 20 25 30
 Ser Ala Val Pro
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<210> 27
 <211> 35
 <212> PRT
 <213> Mouse

<400> 27
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 His Lys Asp Tyr Ile Thr Glu Lys Leu Tyr Asn Ala Phe Leu Ala Gly
 20 25 30
 Ser Val Pro

35

<210> 28
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 <212> PRT
 <213> Dictyostelium discoideum

<400> 28
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 1 5 10 15
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 20 25 30
 Thr Ile Pro
 35

<210> 29
 <211> 35
 <212> PRT
 <213> Helicobacter pylori

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 1 5 10 15
 Gly Tyr Gly Tyr Val Thr Glu Lys Ile Leu Asp Ala Tyr Phe Ser His
 20 25 30
 Thr Ile Pro
 35

<210> 30
 <211> 35
 <212> PRT
 <213> Helicobacter pylori

<400> 30
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 1 5 10 15
 Gly Tyr Gly Tyr Val Thr Glu Lys Ile Ile Asp Ala Tyr Phe Ser His
 20 25 30
 Thr Ile Pro
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<210> 31
 <211> 36
 <212> PRT
 <213> Caenorhabditis elegans

<400> 31
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 1 5 10 15
 Cys Glu Asp Tyr Val Thr Glu Lys Leu Trp Lys Ser Gly Tyr Gln Asn
 20 25 30
 Thr Ile Ile Pro
 35

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care of